

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please ADD new claims 17-18 in accordance with the following:

1. (Original) A simulation device for simulating operations of a plurality of machines which operate in accordance with operation programs, said simulation device comprising:

operation program providing means for providing operation programs to arithmetic processing means for obtaining lapsing time information of operations of the machines and positional information of the machines associated with the lapsing time information;

receiving means for receiving the lapsing time information and the positional information obtained by the arithmetic processing means;

uniting means for uniting the positional information of the plurality of machines received by said receiving means in the order of lapsing time in simultaneous operations of the machines using the lapsing time information in the operations of the plurality of machines received by said receiving means; and

display control means for simultaneously displaying modeled images of the plurality of machines on a display device by animation based on the positional information of the plurality of machines united by said uniting means to thereby simulate the simultaneous operations of the plurality of machines.

2. (Original) A simulation device for simulating operations of a plurality of machines according to claim 1, including the arithmetic processing device.

3. (Original) A simulation device for simulating operations of a plurality of machines according to claim 1, wherein said lapsing time information includes one of time information in execution of the operation program and lapsing time from a start of execution of the operation program.

4. (Original) A simulation device for simulating operations of a plurality of machines according to claim 1, wherein the simulation device is divided into a first simulating section

having said operation program providing means, said receiving means and said uniting means; and a second simulating section having said display control means.

5. (Original) A simulation device for simulating operations of a plurality of machines according to claim 1, wherein said operation program includes an interlock command for the plurality of machines and said display control means displays modeled images of the plurality of machines on the display device by animation taking account of the interlock command.

6. (Original) A simulation device for simulating operations of a plurality of machines according to claim 1, wherein said arithmetic processing means includes one of a controller of the machine, an information processing device having the arithmetic processing means equivalent to the controller of the machine.

7. (Original) A simulation device for simulating operations of a plurality of machines according to claim 1, wherein said machines include industrial robots.

8. (Original) A simulation device for simulating operations of a plurality of machines according to claim 1, wherein said machines include machine tools.

9. (Original) A simulation device for simulating operations of a plurality of machines which operate in accordance with operation programs, said simulation device comprising:

receiving means for receiving lapsing time information of operations of the machines and the positional information of the machines associated with the lapsing time information obtained by arithmetic processing means;

uniting means for uniting the positional information of the plurality of machines received by said receiving means in the order of lapsing time in simultaneous operations of the machines using the lapsing time information in the operations of the plurality of machines received by said receiving means; and

display control means for simultaneously displaying modeled images of the plurality of machines on a display device by animation based on the positional information of the plurality of machines united by said uniting means to thereby simulate the simultaneous operations of the plurality of machines.

10. (Original) A simulation device for simulating operations of a plurality of machines

according to claim 9, including the arithmetic processing device.

11. (Original) A simulation device for simulating operations of a plurality of machines according to claim 9, wherein said lapsing time information includes one of time information in execution of the operation program and lapsing time from a start of execution of the operation program.

12. (Original) A simulation device for simulating operations of a plurality of machines according to claim 9, wherein the simulation device is divided into a first simulating section having said receiving means and said uniting means; and a second simulating section having said display control means.

13. (Original) A simulation device for simulating operations of a plurality of machines according to claim 9, wherein said operation program includes an interlock command for the plurality of machines and said display control means displays modeled images of the plurality of machines on the display device by animation taking account of the interlock command.

14. (Original) A simulation device for simulating operations of a plurality of machines according to claim 9, wherein said arithmetic processing means includes one of a controller of the machine, an information processing device having the arithmetic processing means equivalent to the controller of the machine.

15. (Original) A simulation device for simulating operations of a plurality of machines according to claim 9, wherein said machines include industrial robots.

16. (Original) A simulation device for simulating operations of a plurality of machines according to claim 9, wherein said machines include machine tools.

17. (New) A method for simulating operations of machines in a system, comprising: executing operation programs specific to each of the machines to obtain lapsing time information and positional information associated with the lapsing time information for each of the machines; and

simultaneously displaying modeled images of the machines based on the obtained positional information of each of the machines united in order of lapsing time to simulate

simultaneous operations of the machines.

18. (New) A simulation device for simulating operations of machines in a system, comprising:

a processing section executing operation programs specific to each of the machines to obtain lapsing time information and positional information associated with the lapsing time information for each of the machines; and

a display simultaneously displaying modeled images of the machines based on the obtained positional information of each of the machines united in order of lapsing time to simulate simultaneous operations of the machines.